

Climate Change and its impacts on Elderly Road Users in Malta: A call for new policies?



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The Elderly Population in Malta

Malta has a high elderly population. This increased rapidly throughout the years and is projected to further accelerate in the future. In 2011, the elderly population in Malta (60+) was 98,786, representing 24% of the entire population. The number of elderly females exceeded that of the males (Figure 1). However, the increase between 2005 and 2011 was higher for males: +31% (Figure 2).

This is an indication that due to several health improvements, life expectancy of elderly in Malta is increasing. Indeed, the Maltese elderly population is healthier than the EU-27 average. In 2010, the healthy life year indicator showed that on average, men and women in Malta at the age of 65 are expected to live a further 12 and 11.9 years respectively in a healthy condition (PwC, 2012).

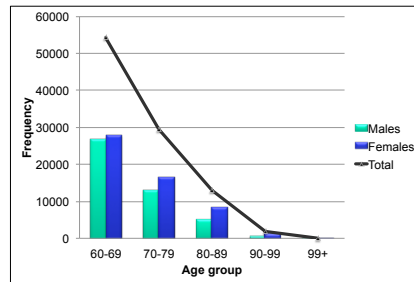


Figure 1. Elderly population by gender and age group in Malta in 2011 (Adapted from NSO, 2014a)

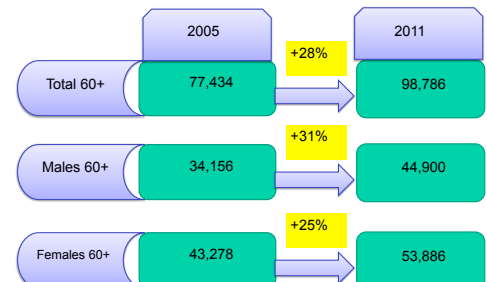


Figure 2. Elderly population increase between 2005 and 2011 in Malta (Adapted from NSO, 2007; 2014a)

Elderly Driving Licence Holders in Malta

Elderly people are usually high public transport users. Yet, the possession of driving licence among persons above the age of 60 years is increasing at a very fast rate. Actually between 2009 and 2013, the highest increase in the number of driving licence holders in Malta was for elderly people (+9549) (Figure 3). This represented an increase of 24%, which contrasted sharply with the other age groups (Table 1). The number of elderly males possessing a driving licence highly exceeds that for elderly females (Figure 4). However the number of elderly females possessing a driving licence also increased significantly between 2009 and 2013 (+3,632). This is an indication that in the near future the discrepancy between males and females elderly driving licence holders will continue to diminish. Such figures show that the main mode of transport that elderly people in Malta use for their basic mobility needs is the private car. This is one major cause for climate change.

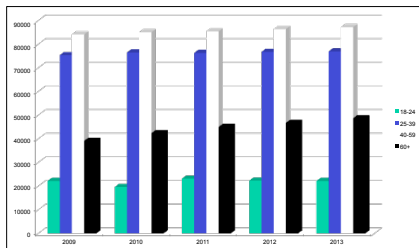


Figure 3. Licence holders by age group between 2009 and 2013 (Adapted from NSO, 2010-2014b)

Age Group	Driving Licence Holders Increase (2009-2013)	Percentage Increase (2009-2013)
18-24	17	0.1
25-39	1596	2
40-59	3049	4
60+	9549	24

Table 1. Increase in licence holders by age group between 2009 and 2013; steepest increase for elderly people (Adapted from NSO, 2010-2014b)

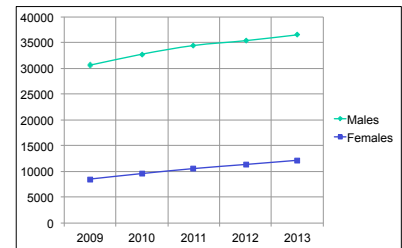


Figure 4. Increase in 60+ licence holders by gender between 2009 and 2013 (Adapted from NSO, 2010-2014b)

Elderly Road Users and Climate Change

Figure 5 shows that older people are potential contributors to, and casualties of climate change. However they are also potential campaigners to tackle the problem (Haq et al., 2008). This means that through the increase in car use, and thus the increase in **carbon emissions**, elderly people are contributing to climate change. However being a **vulnerable group**, elderly can be at more risk from climate related threats. This is mainly due to the physical frailty and health issues which are usually associated with old age. Elderly people are also campaigners, because due to an increase in awareness to use **alternative and sustainable modes of transport**, they can reduce their carbon emissions.

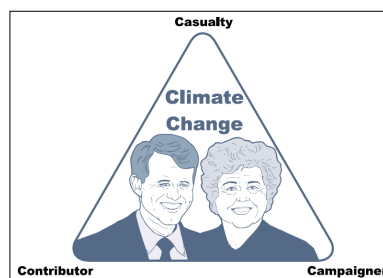


Figure 5. Climate Change and Older People (Haq et al., 2008)

The availability of assets and access to services, such as transport, affect the individual's resilience to adopt to climate change (Haq et al., 2008). Amongst the threats in old age there is that of social isolation. In fact, **accessible transport** is important to reduce social isolation as it is essential provide independent mobility, particularly in old age. This makes **public transport** a necessity for elderly people, as it can offer autonomous travel for non-drivers (Currie and Delbosc, 2010). Thus, lack of accessibility to transport can lead to depression, isolation and social exclusion in old age (Engels and Liu, 2011). This is mainly due to the fact that apart from the lack of mobility, inaccessibility to transport services also inhibits access to other important daily activities and services, such as health care.

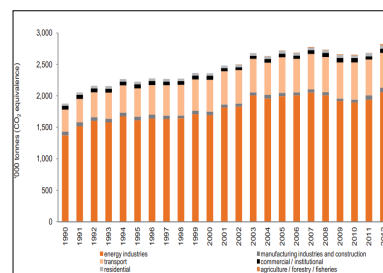


Figure 6. Emission sources for the energy sector: transport is the second source (NSO, 2014c)

Climate change can also lead to extreme weather events. These affect transport systems in different manners such as through a higher driving difficulty in flooded areas. Furthermore, more extreme heat in summer can make it further exhaustive for elderly road users, particularly those waiting on bus stops without shelter or seating. This is further worse when there are delays. Extreme weather events also negatively affect elderly pedestrians. Since elderly do not tend to travel long distances, walking is a very popular mode of transport amongst this demographic group.

In order to combat the problem of climate change, policies may need to increase the cost of private cars so as to reduce GHG emissions. Rise in oil and energy prices can also make driving more expensive. Thus improvement in public transport accessibility is essential to meet the different needs of elderly people.

Recommendations to improve the compatibility between climate change and elderly road users

- Improvements in transport accessibility;
- Policies targeting integrative measures that ensure an active and healthy ageing;
- Integration between different modes of transport to meet the needs of a diverse elderly population;
- Adequate transport infrastructure;
- Land-use and transport integration;
- Initiatives for green travel plans, increase in public transport usage, community transport, car sharing and walking. Such measures help to provide independent mobility and simultaneously reduce carbon emissions.
- Educational campaigns focusing on sustainable mobility;
- Educational campaigns focusing on more fuel-efficient vehicles.

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